UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,917	04/21/2004	Kuo Chuan Wu	BA-22882	5641

7590 07/16/2007

BUCKNAM AND ARCHER
1077 Northern Boulevard
Roslyn, NY 11576-1696

EXAMINER	
UNELUS, ERNEST	

ART UNIT	PAPER NUMBER
2181	

MAIL DATE	DELIVERY MODE
07/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/828,917	WU ET AL.	
	Examiner	Art Unit	
	Ernest Unelus	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters; prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

RESPONSE TO AMENDMENT

Claim rejections based on prior art

Applicant's arguments filed 04/09/2007 have been fully considered but they are not persuasive.

The applicant argues that the detection port circuit 37 of Jae-Sung, the cited reference, is different from the applicant's detection circuit. The applicant stated that the detection port 37 doesn't determine whether the personal computer is on or not. This argument is not found to be persuasive because paragraph 0045 of Jae-Sung discloses "A detection port 37 is connected to the multi-media device to check voltage (for example, 0 volt) when the multimedia device is not in operation and make a power control terminal 39 active in accordance with the checked result. At this time, a control circuit 38 functions to block the supply of power from the adapter 36, thereby causing all components in the computer to be supplied with power from the main power supply 35". Is it clearly discloses that the detection port 37 "make a power control terminal 39 active in accordance with the checked result". Therefore, the detection port 37 determines whether the personal computer is in power-on status or not. Through the power on of the computer, the detection is indirectly using the data bus, the data switch, which is use to connected the computer and the microprocessor to the device 40 (the combination of the amplification circuit 8, disc player 2, and audio signal reproduction circuitry 6, as discloses in paragraphs 0040 to 0042).

The examiner has previously indicated that Jae-Sung's CPU 4 of the computer is comparable to the applicant's present invention; the examiner maintains this rejection after further review of the applicant's claim invention and the Jae-Sung reference. Jae-Sung discloses the CPU 4 of the computer to control the optical device; see paragraph 0024 and fig. 5 for further detail.

I. INFORMATION CONCERNING OATH/DECLARATION

Oath/Declaration

1. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63.**

II. STATUS OF CLAIM FOR PRIORITY IN THE APPLICATION

As required bye **M.P.E.P. 201.14(c)**, acknowledgement is made of applicant's claim for priority based on applications filed on December 04, 2003 (Taiwan 092134254).

III. INFORMATION CONCERNING DRAWINGS

Drawings

2. The applicant's drawings submitted are acceptable for examination purposes.

IV. ACKNOWLEDGEMENT OF REFERENCES CITED BY APPLICANT

3. As required by **M.P.E.P. 609(C)**, the applicant's submissions of the Information Disclosure Statements dated February 10, 2006 is acknowledged by the examiner and the cited

references have been considered in the examination of the claims now pending. As required by **M.P.E.P 609 C(2)**, a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

V. REJECTIONS BASED ON PRIOR ART

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 3-13, 15, and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jae-Sung (EP 1117030) in view of Beckert et al. (US pat. 5,794,164).

6. As per **claim 16**, according to "An optical storage drive device for multimedia audio/video system having a CD driver, a picture viewer, a DVD driver, a digital video recorder (DVR), a FM radio and a MP3 music CD monolithically integrated in a single device", **this preamble is intended use.**

Jae-Sung discloses an optical storage drive device **(disc player 2 of fig. 1)** comprising;

a video/audio input/output selector **((CD-ROM) interface, as discloses in para. 0025)** for inputting video/audio signals and for /outputting video/audio signals to an external device

(speaker 10, as discloses in para. 0026) (see para. 0025, which discloses outputting an input analog audio signal from the disc player 2 CD-ROM interface);

a video/audio encoder/decoder for encoding input video/audio signal before storing and for decoding stored video/audio signal before outputting to said external device through said video/audio input/output selector **(see paragraph 0038, which discloses "As stated previously, the disc player 2 may further include a decoder and encoder for decoding and encoding an MPEG file, respectively. By means of this construction, a real-time input audio signal can be com-pressed and stored in the form of an MPEG file, and MPEG audio data from the CPU can be decoded, amplified and reproduced through the speaker")**;

a microprocessor **(CPU 4 of the computer, as discloses in para. 0024)** for controlling the operation of said optical data storage drive device in accordance with a key-in or pre-stored instruction and the read/write of the BIOS data of an external personal computer **(see para. 0024. See also paragraph 0051, which discloses an operational panel 42 with buttons for the operation of the disc player)**;

an optical storage device **(a compact disc (CD), as discloses in para. 0019)**, for reading/writing the encoded video/audio signal and data signal **(the MPEG data, as discloses in para. 0024)** from said microprocessor through a bus switch **(the data bus, as discloses in para. 0024) (see paragraph 0024, which discloses "The disc player 2 further includes a decoder connected to a central processing unit (CPU) 4 of the computer via a data bus for processing data of an MPEG format. That is, the decoder is adapted to decode MPEG data from the CPU 4 of the computer and output the de\-coded result in a digital and/or analog form". See para. 0038 for further detail)**;

a status display **(display 28, as discloses in para. 0048)** for displaying the operation status of said personal computer and said optical data storage device **(see paragraph 0048)** and controlled by a display controller **(the microcomputer 22, as discloses in para. 0031)** connected to said microprocessor **(see paragraph 0048, which discloses "The operating panel 42 and display (preferably, VFD) 28 are installed in the front part of the multimedia device, thereby allowing the user to conveniently control the device and view the operating state of the device". See also paragraph 0031, which discloses "A display 28, which may preferably be a vacuum fluorescent display (VFD), is adapted to provide a visual indication of the operating state of the multimedia device to the user under the control of a VFD driver 29 connected to the microcomputer 22". See fig. 1 and para. 0025, which discloses a connection of the CPU and the microcomputer (inside the audio s. 8) through the audio sig. 6 using the data bus)**;

a power amplifier **(power amplifier 18)**, connected to said video/audio encoder/decoder for amplifying said input signal and decoded output audio signal **(see paragraph 0028)**; and a speaker **(speaker 10)**, connected to said power amplifier for outputting said amplified audio signal **(see fig. 2).**

a power-on detector **(A detection port 37 of fig. 3)** connected to a power supply of said external personal computer and said microprocessor **(see fig. 3)**, the power-on detector detects the power-on status of said external personal computer and signals said microprocessor to control said bus switch to release the standard interface **(the main power supply 35, as discloses in fig. 3)** between said external personal computer and said optical data storage drive device **(See paragraph 0045, which discloses, "A detection port 37 is connected to the multimedia**

device to check voltage (for example, 0 volt) when the multimedia device is not in operation and make a power control terminal 39 active in accordance with the checked result") so as to operate without the power supply of said external personal computer when the external personal computer is off **(see paragraph 0016, discloses "Preferably, the multimedia device may further comprise an adapter for supplying power to the multimedia device separately from a main power supply of the personal computer, whereby the user can appreciate the compact disc using the operation means without booting the personal computer". See also paragraph 0043, which discloses the device using the adapter to play CD)**, whereas when said external computer power-on status is detected **(see para. 0045, which discloses "when the computer is powered on, ...")**, said microprocessor controls said bus switch to resume the function of said standard interface **(supplying power from the computer)** so as to operate said optical data storage drive device through the power supply of said external personal computer **(see paragraph 0045, which also discloses "At this time, a control circuit 38 functions to block the supply of power from the adapter 36, thereby causing all components in the computer to be supplied with power from the main power supply 35. The current control means shown in Fig. 3 may preferably include a DC-DC converter for, when the computer is powered on, supplying 12V DC power from the main power supply 35 to the multimedia device and blocking the supply of power from the adapter 36". See paragraphs 0045 and 0024, which discloses the CPU of the computer controlling the device 40)**.

Jae-Sung fails to specifically disclose "a memory card reader, for reading/writing the encoded video/audio signal and data from said microprocessor through said bus switch connected to said microprocessor".

Beckert discloses "a memory card reader **(smart card reader 42 in fig. 3)**, for reading/writing the encoded video/audio signal and data from said microprocessor through said bus switch connected to said microprocessor" **(see fig. 3)**.

Jae-Sung (EP 1117030) and Beckert et al. (US pat. 5,794,164) are analogous art because they are from the same field of endeavor of multimedia computer device.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the multimedia device for a personal computer comprising a disc player connected to a central processing unit of the personal computer and adapted to play back compact disc as described by Jae-Sung and a vehicle computer system has a housing sized to be mounted in a vehicle dashboard or other appropriate location as taught by Beckert.
The motivation for doing so would have been because Beckert teaches **("The computer 22 includes at least one storage drive which permits the vehicle user to download programs and data from storage medium")**

Therefore, it would have been obvious to combine Beckert et al. (US pat. 5,794,164) and Jae-Sung (EP 1117030) for the benefit of creating a multimedia computer device for to obtain the invention as specified in claim 1.

7. As per **claim 3**, the combination of Jae-Sung and Beckert disclose "Wherein said optical storage driving device is of stand-alone type **[with respect to this limitation, see Jae-Sung, paragraph 0016]**.

8. As per **claim 4**, the combination of Jae-Sung and Beckert disclose "wherein said optical storage driving device is of portable type" **[with respect to this limitation, see Jae-Sung, paragraph 0010]**.

9. As per **claim 5**, the combination of Jae-Sung and Beckert disclose "wherein said optical storage driving device can be built-in to a personal computer or externally connected thereto" **[with respect to this limitation, see Jae-Sung, paragraph 0012]**.

10. As per **claim 6**, the combination of Jae-Sung and Beckert disclose "wherein said built-in/external device can be a video/audio signal providing device and a video/audio signal player including television, projector, plasma display panel, liquid crystal display and monitor of a personal computer" **[with respect to this limitation, see Jae-Sung, paragraph 0010]**.

11. As per **claim 7**, the combination of Jae-Sung and Beckert disclose "wherein said optical storage device including {one of } CD-ROM, CD-R, CD-RW, DVD-ROM, DVD-R, DVD-RW, DVD+R, DVD+RW and DVD-RAM servers" **[with respect to this limitation, see Jae-Sung, paragraph 0019]**.

12. As per **claim 8**, the combination of Jae-Sung and Beckert disclose "wherein said status display includes one of vacuum fluorescent display (VFD) and liquid crystal display (LCD)" **[with respect to this limitation, see Jae-Sung, fig. 2]**.

13. As per **claim 9**, the combination of Jae-Sung and Beckert disclose "wherein said display is used to display the mode selection, adjustment controlling, and status indicator of said functions" **[with respect to this limitation, see Jae-Sung, paragraph 0048, which discloses " The operating panel 42 and display (preferably, VFD) 28 are installed in the front part of the multimedia device, thereby allowing the user to conveniently control the device and view the operating state of the device". see also paragraph 0049]**.

14. As per **claims 10 and 11**, the combination of Jae-Sung and Beckert disclose "wherein said personal computer includes one of a desktop computer, notebook computer, tablet computer and Macintosh computer" **[with respect to this limitation, see Jae-Sung, fig. 5]**.

15. As per **claim 12**, the combination of Jae-Sung and Beckert disclose "wherein said standard interface can be one of the ATAPI-IDE, the serial ATA or SCSI, the USB 1.1/2.0 built-in or externally connected to a personal computer and a IEEE 1394 standard interface" **[with respect to this limitation, see Jae-Sung, fig. 5]**.

16. As per **claim 13**, the combination of Jae-Sung and Beckert disclose "wherein said power-on detector is used to detect the voltage on the power supply unit of a personal computer or to detect the computer host reset signal (HRST) on the connecting bus between said personal computer and said panel controller so as to confirm the on status of the power supply" **[with respect to this limitation, see Jae-Sung, paragraph 0045, which discloses "A detection port 37 is connected to the multimedia device to check voltage (for example, 0 volt) when the**

multimedia device is not in operation and make a power control terminal 39 active in accordance with the checked result. At this time, a control circuit 38 functions to block the supply of power from the adapter 36, thereby causing all components in the computer to be supplied with power from the main power supply 35. The current control means shown in Fig. 3 may prefer ably include a DC-DC converter for, when the computer is powered on, supplying 12V DC power from the main power supply 35 to the multimedia device and blocking the supply of power from the adapter 36"].

17. As per **claim 15**, the combination of Jae-Sung and Beckert disclose "wherein said optical storage driving device is powered by DC or AC power supply" **[with respect to this limitation, see Jae-Sung, paragraph 0045]**.

18. **Claims 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Jae-Sung (EP 1117030) and Beckert et al. (US pat. 5,794,164) as applied to claim 16 above, and further in view of Kovacevic (US 2002/0126703).

19. As per **claim 14**, Jae-Sung and Beckert disclose "The optical storage driving device as set forth in claim 1," **[See rejection to claim 1 above],** including a connecting device equipped with a power connector, a CD analogue audio output connector **(see, Beckert, fig. 4),** while said connecting device has a dominating bus and an input/output bus so as to increase the expandability of said optical storage driving device **(see, Beckert, fig. 4, which discloses the vehicle battery having 10-16volts compare to the power supply being only12, that's the**

reason why the vehicle battery bus will dominate over an input/output bus so as to increase the expandability of said optical storage driving device. See col. 6, lines 3-18), but fail to specifically discloses a Sony-Phillips digital interface (SPDIF) output connector.

Kovacevic discloses a Sony-Phillips digital interface (SPDIF) output connector **(see paragraph 0018).**

Jae-Sung (EP 1117030), Beckert et al. (US pat. 5,794,164), and Kovacevic (US 2002/0126703) are analogous art because they are from the same field of endeavor of multimedia computer device.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the multimedia device for a personal computer comprising a disc player connected to a central processing unit of the personal computer as described by Jae-Sung and Beckert and a method of synchronizing the output of processed audio data to the output of processed video data as taught by Kovacevic.

The motivation for doing so would have been because Kovacevic teaches a Sony-Phillips digital interface (SPDIF) output connector help with conversion **(see paragraph 0018)**

Therefore, it would have been obvious to combine Kovacevic (US 2002/0126703) and Beckert et al. (US pat. 5,794,164) with Jae-Sung (EP 1117030) for the benefit of creating a multimedia computer device for to obtain the invention as specified in claim 14.

VI. RELEVANT ART CITED BY THE EXAMINER

20. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **MPEP 707.05(c)**.

21. The following reference teaches a multi-functional optical disk driving device.

U.S. PATENT NUMBER

US 6,954,804

V. CLOSING COMMENTS

Conclusion

a. STATUS OF CLAIMS IN THE APPLICATION

22. The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P. 707.07(i)**:

a(1) CLAIMS REJECTED IN THE APPLICATION

23. Per the instant office action, claims 3-16 have received a final action on the merits.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

b. DIRECTION OF FUTURE CORRESPONDENCES

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernest Unelus whose telephone number is (571) 272-8596. The examiner can normally be reached on Monday to Friday 9:00 AM to 5:00 PM.

IMPORTANT NOTE

25. If attempts to reach the above noted Examiner by telephone is unsuccessful, the Examiner's supervisor, Mr. Alford Kindred, can be reached at the following telephone number: Area Code (571) 272-4037.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 08, 2007

Ernest Unelus
Examiner
Art Unit 2181

ALFORD KINDRED
PRIMARY EXAMINER